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October 14, 1995

Office of the Secretary
Federal Communications Commission
1919 M Street NW
Washington, DC 20554

Dear Madam or Sir:

The following comments are submitted to MM Docket No. 95-135. We thank you in advance for assuring that they are properly processed, and for your usual cooperation in doing so. Four or five more duplicate copies will also be sent in a separate container, as an original and four copies are to be submitted.

Respectfully submitted,

Theodore G. Hammond
Theodore G. Hammond

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COMMENTS TO
MM DOCKET 95-135
RM-8681

Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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DOCKET FILE COPY ORIGINAL

In The Matter of]	
]	
Amendment of Section 73.202(b)]	RM8681
FM Table of Assignments]	
]	MM Docket No. 95-135
Honor, Michigan]	

COMMENTS TO MM DOCKET NO. 95-135

The following comments are submitted in opposition to RM8681, which is a proposed rulemaking to allot Channel 264A to Honor, MI. These comments contain technical exhibits to support this opposition. They also contain arguments and technical exhibits in favor of the counterproposal to the proposed rulemaking submitted by Roger L. Hoppe, II to upgrade WZTU by one step application to Channel 264C2 at Bear Lake, MI, which is mutually exclusive with this proposed rulemaking, and are intended to amplify and supplement this counterproposal. The commenter is the preparer of the technical exhibits in the one step application also.

The commenter believes that it is much more in the public interest and a much better use of FM Broadcast spectrum space to increase the facilities of WZTU to Class C2 on Channel 264 for the following reasons than to allot Channel 264A to Honor, MI. Even though it would qualify as a *first local service* to Honor, this allotment would constitute an abuse of the very process and policies under which it was proposed. The Commission must consider first whether policy regarding *first local service* in this specific case

outweighs other public interest issues, particularly relating to the relative increase in population served by an upgrade of WZTU to Class C2 versus the population afforded new service by a new Class A at Honor.

A history of rulemaking proceedings involving WZTU (formerly WRQT) is relevant in these comments and in the one step application counterproposal in assuring that other public interest issues are addressed and in establishing precedent. In 1987, Andrew L. Banas petitioned to upgrade WRQT from Channel 261A to Channel 262C2. In the Report and Order terminating the proceeding in MM Docket No. 87-182, Ditmer Broadcasting Company, licensee of WQON (now WGRY) was allotted Channel 262C2 at Grayling, MI after Ditmer Broadcasting counterproposed Andrew L. Banas' petition for WRQT (now WZTU) to upgrade to Channel 262C2 at Bear Lake, MI. Ditmer Broadcasting Company proposed Channel 264C2 to Bear Lake as an alternative channel. Andrew L. Banas objected that a severe disruption would occur since he would have to relocate his transmitter site. Ditmer was awarded Channel 262C2 on the basis of the population increase which would result from WQON increasing facilities versus that which would result from WRQT increasing facilities. This was very close- an increase of 57,508 for WQON versus an increase of 54,319 for WRQT- about a 6% difference in increase.

Since the counterproposal filed by Ditmer Broadcasting to MM Docket 87-182 in July, 1987, many regulatory changes have occurred which would have made a resolution much easier in this case. Had Class C3's, Class C2's under Section 73.215, and upgrades by one-step application been available at the time of these proceedings, WRQT (now WZTU) could have immediately utilized its original and present location at that time for Channel 264C3 or Channel 264C2 under Section 73.215. Instead, WRQT went silent and into bankruptcy, and after license transfer to Roger L. Hoppe, II and returning to the air with new call letters, WZTU has remained at 3 kW on Channel 261A. WGRY, which was

then WQON, now even has a construction permit for Channel 262C1 with 60 kW, which is short spaced to WZTU under Section 73.215. WZTU has received interference complaints about WGRY, even with its licensed 26.5 kW Channel 262C2 facilities. A move by WZTU to Channel 264C2 would also eliminate this interference and the short spacing created by WGRY. The petition for Honor, MI at its coordinates N 44 41 26 W 86 01 05 even forces the fully spaced 6 kW area for WZTU on Channel 261A out into Lake Michigan (Exhibit 1) because WZTU is only fully spaced as a 3 kW Class A under prior rules outlined in Section 73.213 (c)(1) to WSHN but not as a 6 kW Class A. The combined effect is to box in WZTU to its present 3 kW facilities or at best making it difficult to upgrade even to 6 kW without waivers and negotiated agreements. It is short spaced as a 6 kW Class A on Channel 261 at its present site to WSHN (Exhibit 2) and the site proposed in the one step application because of RM8681 on Channel 264 at Honor, MI (Exhibit 3). The counterproposal would eliminate all short spacing to WZTU, including that to WSHN and to the actual construction permit facilities of WGRY.

A search was conducted to see if an alternative channel could be proposed for 264A at Honor (Appendix A), for WZTU from WZTU's present site (Appendix B), or the site proposed in the one-step application for WZTU (Appendix C). No alternative channels, even Class A channels, were found at any of these sites.

Locking WZTU into its present 3 kW facilities will cause a negative impact on the long term economic viability of the station, as it did for WRQT. One reason why the Commission created new options such as 6 kW Class A's, Class C3's, and Class C2's was to allow stations in sparsely populated areas such as northern Michigan to increase the area and population served, thus increasing their economic viability. In addition, the hilly terrain in this area further degrades signals, making higher power a necessity.

Population studies were performed by hand using 1990 U.S. Census Data, using county, township, city, and village totals, and proportionate areas thereof, to determine the populations within the protected 1 mV/m (60 dBu) contours. The population contained in the present WZTU 1 mV/m contour (Exhibit 4), is 16,121 persons, and that within the WZTU 1 mV/m contour proposed in the one step application (Exhibit 5), is 94,036 persons. The population contained within the 1 mV/m contour which would result from the reference coordinates for Channel 264A at Honor, MI, using 6 kW from 100 meters above average terrain reference facilities (Exhibit 6), is 25,255 persons. The increase in the population within the 1 mV/m resulting from the one-step application for WZTU is thus $(94,036 - 16,121) = 77,915$. The increase in WZTU's facilities would thus result in an *increase of more than three times as many people being served* within the 1 mV/m as would be served by Channel 264A at Honor. Unlike *Banas vs. Dittmer in MM Docket 87-182*, this is *not even close!* The proposed WZTU facility would also place a 3.16 mV/m (70 dBu) signal over Honor, population 292, (Exhibit ^{5 (T.H.)} ~~7~~), a requirement for community of license outlined in Section 73.315, although the one-step application continues to specify the larger community, Bear Lake, population 339, as the community of license. Also, Honor already receives five commercial 3.16 mV/m FM signals, from WGFN, WBNZ, WLDR, WTCM-FM, and WCCW-FM, and a noncommercial 3.16 mV/m FM signal, from WIAA.

Frequency searches were also performed at locations near Honor to see if another frequency could be found which would put a 3.16 mV/m signal over Honor, meeting the requirements of Section 73.315. The petitioner for Channel 264A at Honor, Jacqueline F. Bourgard, lists a Post Office Box 365 in nearby Mesick, MI, population 406, as her mailing address. A phone book search also revealed a street address for a Jacqueline Bourgard in the Mesick area. A frequency search was then run for the Mesick area. Channel 229A was found to be clear to all stations and allotment reference points at a

location N 44-19-52 W 85-42-51, approximately 9 km south of Mesick, thus clearly meeting the requirements of Section 73.207 and Section 73.315 (Exhibit 7). Channel 229A can thus be allotted to Mesick as its *first local service*. A location N 44-29-30 W 85-47-30 was also discovered about 12 km northwest of Mesick which only shows short spacing to the allotment reference point for WBCM Boyne City, MI (Exhibit 8). WBCM is a licensed facility on Channel 228C2. From its licensed location it is fully spaced to all stations and allotments under Section 73.207 and places the required 3.16 mV/m signal over Boyne City under Section 73.315. Hence the allotment reference point, corresponding to its former Class A licensed facility and expired Class C2 construction permit, can be updated to the licensed coordinates, and can thus be ignored. From this location, a 6 kW, 100 m HAAT reference facility can place a 3.16 mV/m signal over Mesick, and Honor is comfortably within the 1 mV/m contour (Exhibit 9), which encompasses a population of 32,671. A 1 mV/m signal should be sufficient to physically serve a small community like Honor. By updating the WBCM allotment reference point to licensed coordinates, Channel 229A could also provide *first local service* to Thompsonville (population 416), or to Buckley (population 402). All three are larger than Honor (population 292), and the population within the 1 mV/m (32,671) is larger than for Channel 264A at Honor (25,255). Since the petitioner appears to have ties to Mesick, the commenter suggests that Channel 229A be allotted to Mesick, MI as an alternative to Channel 264A at Honor.

Another search was run in the Elberta-Benzonia area. Channel 227A was found to be fully spaced to all stations and allotments under Section 73.207 at N 44-41-22 W 86-15-20 (Exhibit 10). From a location N 44-42-20 W 86-13-40 which is only short spaced to the updatable reference coordinates of the WBCM allotment (Exhibit 11), and the 94.7 km spacing to WKJF is rounded up to the required 95 km as specified in Section 73.208 (c)(8), the 3.16 mV/m contour from a 6 kW/100 m reference facility *just misses* Honor,

but could be allotted to Benzonia, population 449, or Elberta, population 478, as their *first local service*, meeting the requirements of Section 73.315 (Exhibit 12). Similarly, from N 44-49-28 W 86-03-53 (Exhibits 13 & 14), the 3.16 mV/m *just misses* Honor, but could be allotted to Empire, population 355, as its *first local service*. Because Benzonia is closest to Honor, the commenter suggests that Channel 227A be allotted to Benzonia, MI as another alternative to Channel 264A at Honor. The land area and hence population served for the Benzonia allotment (11,252 persons) would be less than that computed for Mesick. The commenter reserves judgment, but has doubts as to the wisdom of allotting every possible Class A channel under Section 73.207 in this area, to every small community. But in any event, Honor seems to be one of the least likely candidates for *first local service*, and the possibility obviously exists that other channels are available in other larger nearby communities which have no *first local service*.

Mesick, Thompsonville, Buckley, Benzonia, Elberta, and Empire are all resort service communities. There are also many retirees and vacation homes in these areas. The area features many highly rated golf courses, ski areas, and hunting ranges. These are serviced by many fine restaurants, motels, rental cottages, and lodges. In addition, Benzonia, Elberta and Empire all border on large lakes, with the attendant boating and fishing attractions in addition to the other resort industry. None of these communities have a *first local service*. Honor is smaller than all of these communities.

Unfortunately, another channel is not available which will meet all the requirements of Section 73.207 and Section 73.315 for Honor. However, the fact that Honor is the only community in the area for which an alternative channel cannot provide 3.16 mV/m service, meeting the requirements of Section 73.315, as well as the fact that the petitioner has chosen one of the smallest incorporated communities in the area for the community of license, seems a bit unusual. If it is found to be imperative that Honor receive another

3.16 mV/m signal, WZTU would be that signal, or that signal could easily be provided by a translator or booster licensed to Honor, MI operating under rules outlined in CFR 47 Part 74, rebroadcasting Channel 227A from Benzonia or Channel 229A from Mesick. A translator operated near the center of Honor would only have to place a 3.16 mV/m out about 1.3 km (0.8 mile) to encompass all of Honor. A typical 50 watt translator would put a 3.16 mV/m signal out about 3.2 km (two miles).

Roger L. Hoppe, II also owns the Construction Permit for WRQT on Channel 221A in Beulah, MI. This is a second facility, not to be confused with the original WRQT at Bear Lake. The commenter assisted Mr. Hoppe in finding sites suitable for WRQT and WZTU. After obtaining reasonable assurance of a tower site near the petitioner's Honor reference site, after the original construction permit for WRQT Beulah, MI was granted, the owners of the tower site property reneged, forcing Roger L. Hoppe, II to find another site for WRQT Beulah. There is a group operating in this area called Citizens for Existing Towers, which has opposed nearly every new tower construction proposal in the area. Property owners, real estate agents, and zoning officials delayed responding and failed to respond to reasonable requests, inquiries, and purchase offers, and acted in deceitful and duplicitous ways to prevent Roger L. Hoppe, II from obtaining a tower site anywhere near the area where Channel 264A at Honor might be built. Before Roger L. Hoppe, II gave up on this area and went to Manistee County, some property owners even went so far as to have deed restrictions placed on their land to prohibit tower construction by future buyers of the property. The commenter also believes, after reviewing several county atlases of Benzie County, United States Geological Survey maps, and a CD-ROM map of the Honor area, that the reference coordinates specified in the proposed rulemaking, N 44-41-26 W 86-01-05 are in the Pere Marquette State Forest. The commenter has been advised that the State of Michigan has placed a moratorium on use of state forest land for radio towers, and much of the land in the Honor area is state forest property. In the best

case scenario, it would be difficult to negotiate to use state forest property. Add to this the fact that a new nearby airport, Airway Estates, will preclude about 12 square miles of this area from being used for anything but short structures, and it is doubtful that the Honor facility on Channel 264 could ever be built.

The petitioner may also be operating under the illusion that an Honor facility may be located so as to provide good signal service to Traverse City. Channel 283A at Traverse City was recently reopened for first come, first serve applicants and six applications are on file according to the Commission's databases. However, Channel 283A can be located where good service to Traverse City is possible. The Honor Channel 264A would have to be located at least 15 kilometers west of a high ridge, which runs roughly along a north-south line 5 to 8 kilometers west of Traverse City, to clear the 54th channel IF restriction to WLJN-FM on Channel 210C2 to meet the requirements of Section 73.207. This ridge throws a deep terrain shadow in excess of 400 feet over the entire populous region near Traverse City (Exhibit 15). The Bullington field strength attenuation was computed using Radiosoft software and was found to be 6 dB to 12 dB in the Traverse City area (Exhibit 16). Thus the actual signal strength into Traverse City will be only one quarter to one half that computed using Figure 73.333. In addition, existing radio facilities, even Class C2 and Class C3 facilities, located to the west of this ridge experience much multipath, picketfencing, and low signal problems in Traverse City. A Class A doesn't stand a chance of competing in Traverse City, unless it is located on this ridge where a clear line of sight is obtained, and only Channel 283A meets this criteria.

In conclusion and in summary, and regardless of the intent of the petitioner, the commenter feels that it is much more in the public interest and a more efficient use of FM Broadcast spectrum space to upgrade WZTU to Channel 264C2 at Bear Lake, MI, population 339, than to allot Channel 264A to Honor, MI. A new service to Honor, MI,

population 292, would serve only 25,255 persons within its normally protected 1 mV/m contour at its proposed reference coordinates. WZTU would serve 94,036 persons, 27,915 more persons than it presently serves, within its normally protected 1 mV/m contour, by upgrading from Channel 261A to Channel 264C2 at the proposed coordinates in the one step application counterproposal. With the alternative proposal Channel 229A as a *first local service* to Mesick, MI, population 406, another service to 32,671 persons could also be provided within the normally protected 1 mV/m contour near the petitioners larger home community of Mesick, MI, and this contour would also include Honor, MI.

Respectfully submitted,

A handwritten signature in black ink, reading "Theodore G. Hammond". The signature is written in a cursive style with a small "G" and "H".

Theodore G. Hammond
Consultant

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OCT 16 1995

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**EXHIBITS SUPPORTING
COMMENTS TO
MM 95-135**

RadioSoft 72 Point Display

EXHIBIT 1

Left button:
Distance and
Lat - Lon;
ESC=Exit
C=Cities
F=Field
5=County
6=Roads
7=Rails
8=Water
9=Redraw

LAKE MICHIGAN

FULLY SPACED
AREA
6 KW

270°

N 0°

HUNDA

FRANKFORT

KARLIN

THOMPSONVILLE

ARCADIA

COPEMISH

BEAR LAKE

SHERMAN

YUMA

MANISTEE

MANISTEE R.

FREESBURG

FM Study of
Channel 261A N. 44-25-18 W. 86-07-17

F M R
Ver 1.1

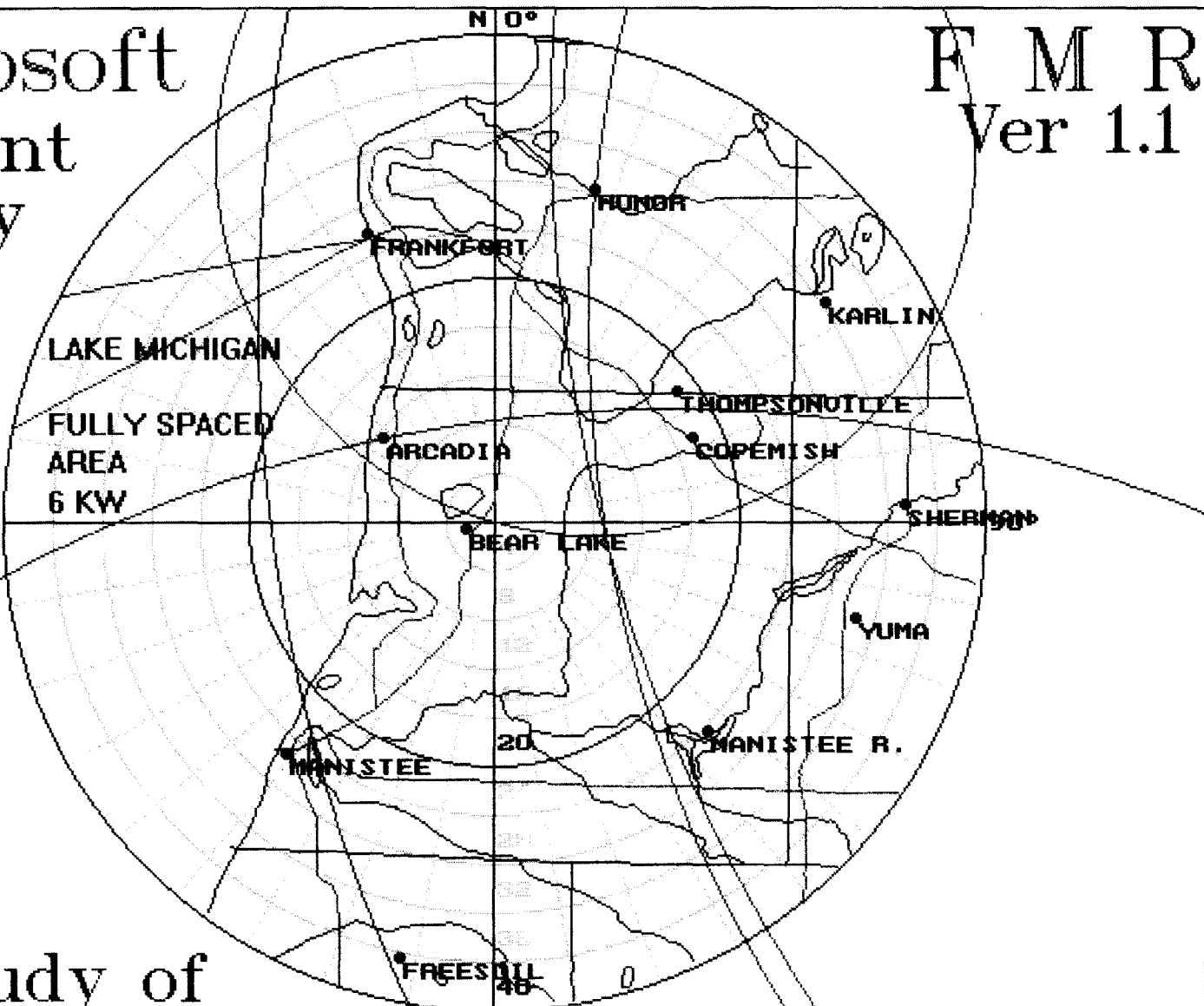


EXHIBIT 2

MAPFM search of channel 261A6 (100.1 MHz), at N. 44 25 18, W. 86 7 17.

Searching Channel 261A6 (100.1 MHz), from the site of WZTU:

CALL	CITY	ST	CHN	CL	S	DIST	SEPN	BRNG	CLEARANCE
WGEEFM	Sturgeon Bay	WI	259	C2	L	122.0	55.0	281.2°	67.0
ALC	Midland	MI	259	C	U	161.6	95.0	128.5°	66.6
WUGN	Midland	MI	259	C	C	161.6	95.0	128.5°	66.6
ALC	Sturgeon Bay	WI	259	C2	U	112.8	55.0	298.5°	57.8
WZTU	Bear Lake	MI	261	A	L	0.0	115.0	0.0°	-115.0
WSHNFM	Fremont	MI	261	A	L	106.6	115.0	172.2°	-8.4
WNCYFM	Neenah-Menasha	WI	261	A	L	185.6	115.0	264.3°	70.6
WGLBFM	Port Washington	WI	261	A	L	184.7	115.0	231.5°	69.7
ALC	Bear Lake	MI	261	A	U	0.0	115.0	0.0°	-115.0
ALC	Fremont	MI	261	A	U	106.6	115.0	172.2°	-8.4
ALC	Port Washington	WI	261	A	U	184.7	115.0	231.5°	69.7
WGLBFM	Port Washington	WI	261	A	C	181.7	115.0	232.0°	66.7
WGRYFM	Grayling	MI	262	C1	C	114.9	133.0	81.7°	-18.1
WNCYFM	Neenah-Menasha	WI	262	C2	C	166.4	106.0	263.7°	60.4
ALC	Neenah-Menasha	WI	262	C2	U	185.6	106.0	264.3°	79.6
ALC	Grayling	MI	262	C1	U	141.5	133.0	76.4°	8.5
WGRYFM	Grayling	MI	262	C2	L	114.9	106.0	81.7°	8.9
W264AC	Traverse City	MI	264	D	A	52.6	0.0	41.4°	52.6
ALC	Honor	MI	264	A	A	31.0	31.0	15.4°	-0.0
W264AC	Traverse City	MI	264	D	L	52.6	0.0	41.4°	52.6

EXHIBIT 3

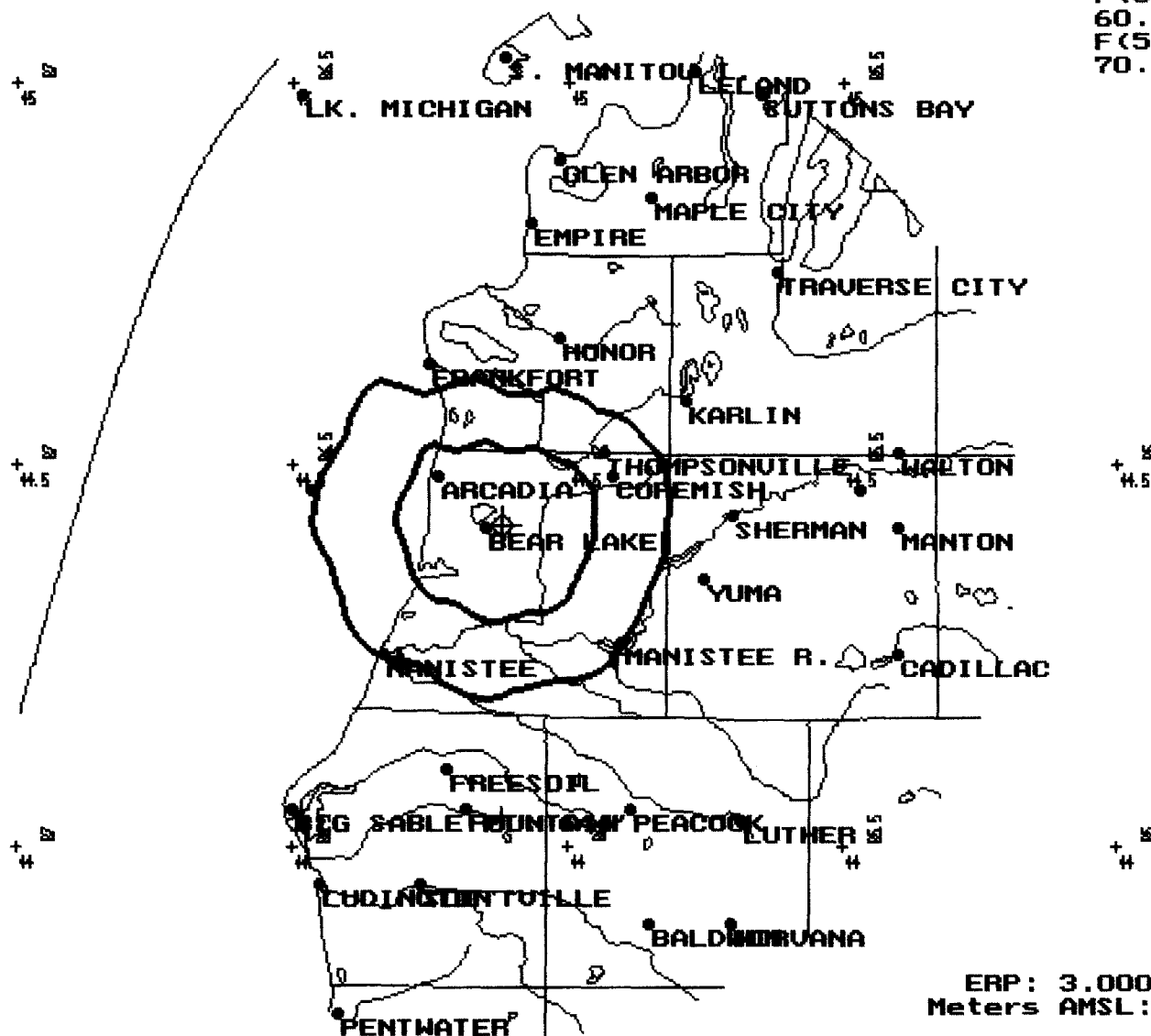
MAPFM search of channel 261A6 (100.1 MHz), at N. 44 30 54, W. 86 6 52.

Searching Channel 261A6 (100.1 MHz):

CALL	CITY	ST	CHN	CL	S	DIST	SEPN	BRNG	CLEARANCE
WGEEFM	Sturgeon Bay	WI	259	C2	L	120.9	55.0	276.4°	65.9
ALC	Midland	MI	259	C	U	167.7	95.0	131.5°	72.7
WUGN	Midland	MI	259	C	C	167.7	95.0	131.5°	72.7
ALC	Sturgeon Bay	WI	259	C2	U	108.6	55.0	293.6°	53.6
WZTU	Bear Lake	MI	261	A	L	10.4	115.0	183.0°	-104.6
WSHNFM	Fremont	MI	261	A	L	116.9	115.0	173.1°	1.9
WNCYFM	Neenah-Menasha	WI	261	A	L	187.3	115.0	261.1°	72.3
WGLBFM	Port Washington	WI	261	A	L	191.6	115.0	229.1°	76.6
ALC	Bear Lake	MI	261	A	U	10.4	115.0	183.0°	-104.6
ALC	Fremont	MI	261	A	U	116.9	115.0	173.1°	1.9
ALC	Port Washington	WI	261	A	U	191.6	115.0	229.1°	76.6
WGLBFM	Port Washington	WI	261	A	C	188.6	115.0	229.6°	73.6
WGRYFM	Grayling	MI	262	C1	C	113.2	133.0	86.9°	-19.8
WNCYFM	Neenah-Menasha	WI	262	C2	C	168.2	106.0	260.2°	62.2
ALC	Grayling	MI	262	C1	U	138.7	133.0	80.5°	5.7
WGRYFM	Grayling	MI	262	C2	L	113.2	106.0	86.9°	7.2
W264AC	Traverse City	MI	264	D	A	44.9	0.0	49.6°	44.9
ALC	Honor	MI	264	A	A	21.0	31.0	21.4°	-10.0
W264AC	Traverse City	MI	264	D	L	44.9	0.0	49.6°	44.9

EXHIBIT 4

F(50,50)
60.0 dBμ
F(50,50)
70.0 dBμ



WZTU

Coordinates:
N 44-25-18
W 86-07-17

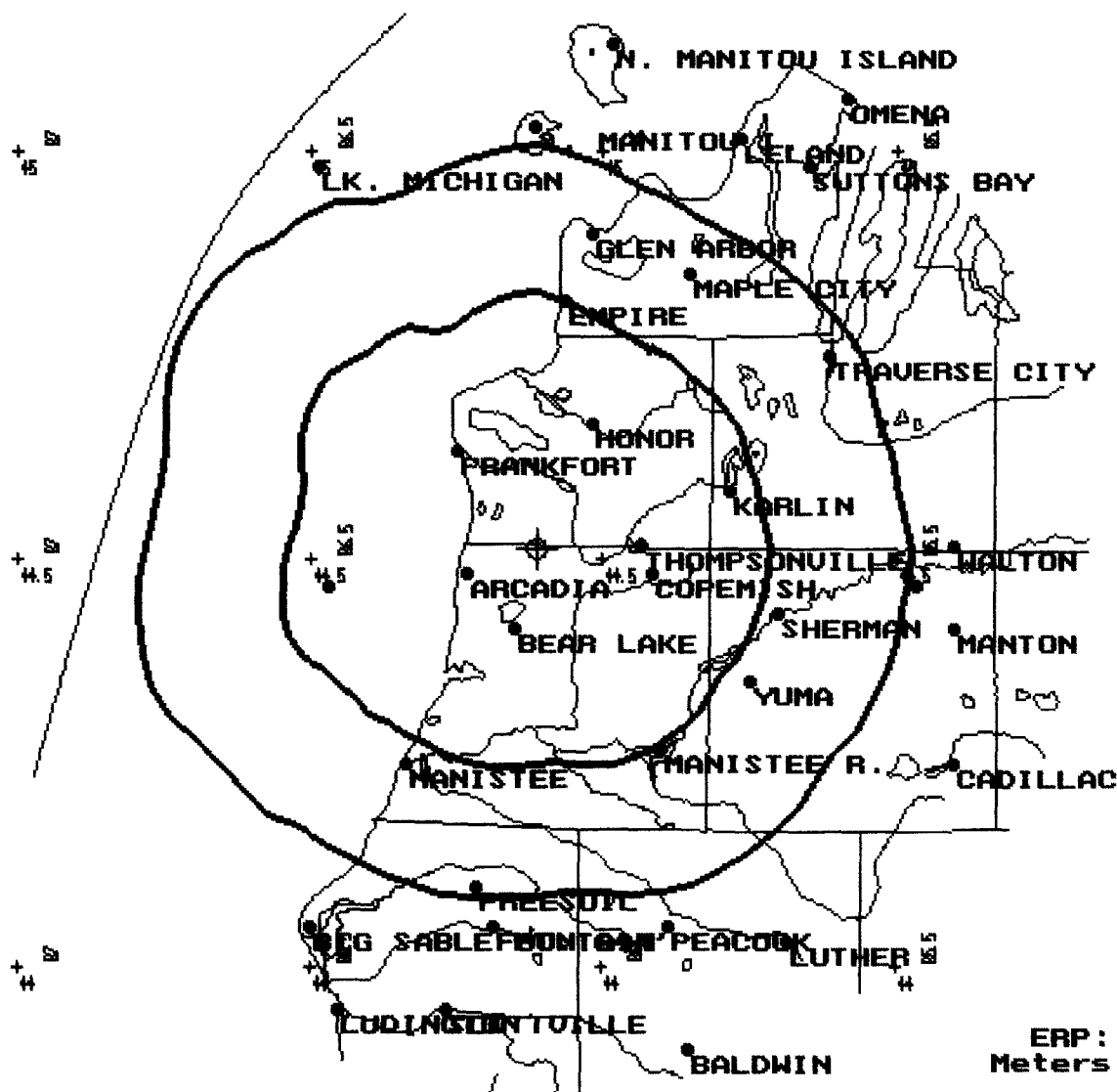
Kilometer Scale
0 10 20 30 40 50 60

ERP: 3.000 kW
Meters AMSL: 332

Map Scale
1:1000000

EXHIBIT 5

F(50,50)
60.0 dBμ
F(50,50)
70.0 dBμ



PROPOSED
WZTU

Coordinates:
N 44-30-54
W 86-06-52

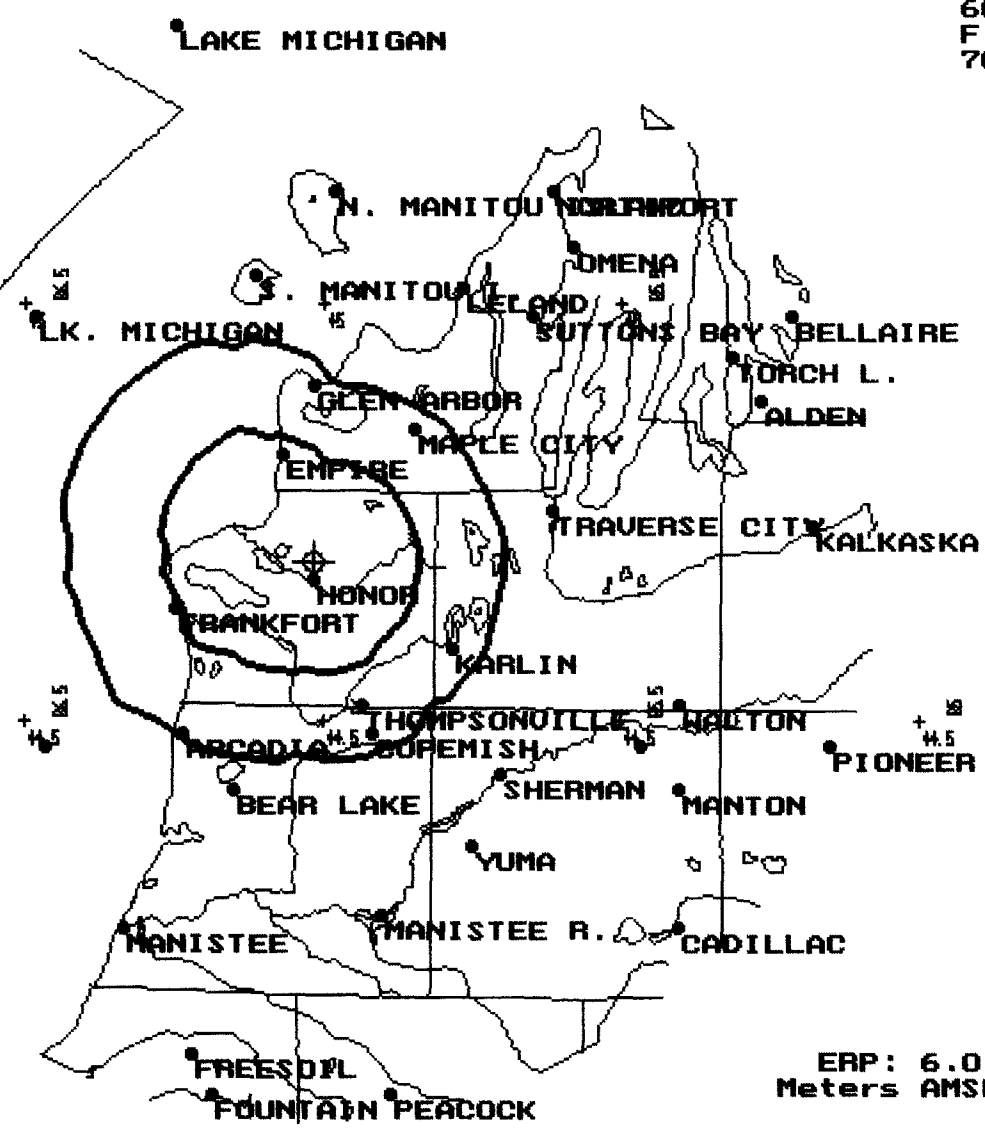
Kilometer Scale
0 10 20 30 40 50 60

ERP: 50 kW
Meters AMSL: 382

Map Scale
1:1000000

EXHIBIT 6

F(50,50)
60.0 dBμ
F(50,50)
70.0 dBμ



PROPOSED
264A HONOR, MI

Coordinates:
N 44-41-26
W 86-01-05

Kilometer Scale
0 10 20 30 40 50 60

ERP: 6.0 kW
Meters AMSL: 331

Map Scale
1:1000000

EXHIBIT 7

MAPFM search of channel 229A6 (93.7 MHz), at N. 44 19 52, W. 85 42 51.

Searching Channel 229A6 (93.7 MHz):

CALL	CITY	ST	CHN	CL	S	DIST	SEPN	BRNG	CLEARANCE
WBCM	Boyne City	MI	228	C2	L	128.6	106.0	30.9°	22.6
ALC	Boyne City	MI	228	C2	U	106.2	106.0	27.5°	0.2
WBCT	Grand Rapids	MI	229	B	L	189.3	178.0	175.7°	11.3
ALC	Grand Rapids	MI	229	B	U	189.3	178.0	175.7°	11.3
WWJR	Sheboygan	WI	229	A	L	175.6	115.0	247.3°	60.6
ALC	Sheboygan	WI	229	A	U	175.6	115.0	247.3°	60.6
ALC	Mio	MI	230	C2	U	106.3	106.0	79.8°	0.3
WCLX	Mio	MI	230	C2	L	116.3	106.0	67.7°	10.3
ALC	Sturgeon Bay	WI	230	C1	U	146.2	133.0	295.9°	13.2
WDORFM	Sturgeon Bay	WI	230	C1	L	146.2	133.0	295.9°	13.2
ALC	Pentwater	MI	231	C3	U	84.7	42.0	223.4°	42.7
WEWM	Pentwater	MI	231	C3	C	70.8	42.0	222.2°	28.8
WEWM	Pentwater	MI	231	C3	C	70.8	42.0	222.2°	28.8
WIAR	Leland	MI	232	C3	L	65.3	42.0	352.5°	23.3
ALC	Leland	MI	232	C3	U	61.2	42.0	344.1°	19.2
NEW	Traverse City	MI	283	A	A	52.0	10.0	1.7°	42.0
NEW	Traverse City	MI	283	A	A	49.7	10.0	4.8°	39.7
NEW	Traverse City	MI	283	A	A	43.4	10.0	1.0°	33.4
NEW	Traverse City	MI	283	A	A	48.8	10.0	1.8°	38.8
NEW	Traverse City	MI	283	A	A	50.5	10.0	6.0°	40.5
ALC	Traverse City	MI	283	A	V	50.5	10.0	5.8°	40.5
NEW	Traverse City	MI	283	A	A	49.6	10.0	2.8°	39.6
NEW	Traverse City	MI	283	A	A	49.6	10.0	2.8°	39.6

EXHIBIT 8

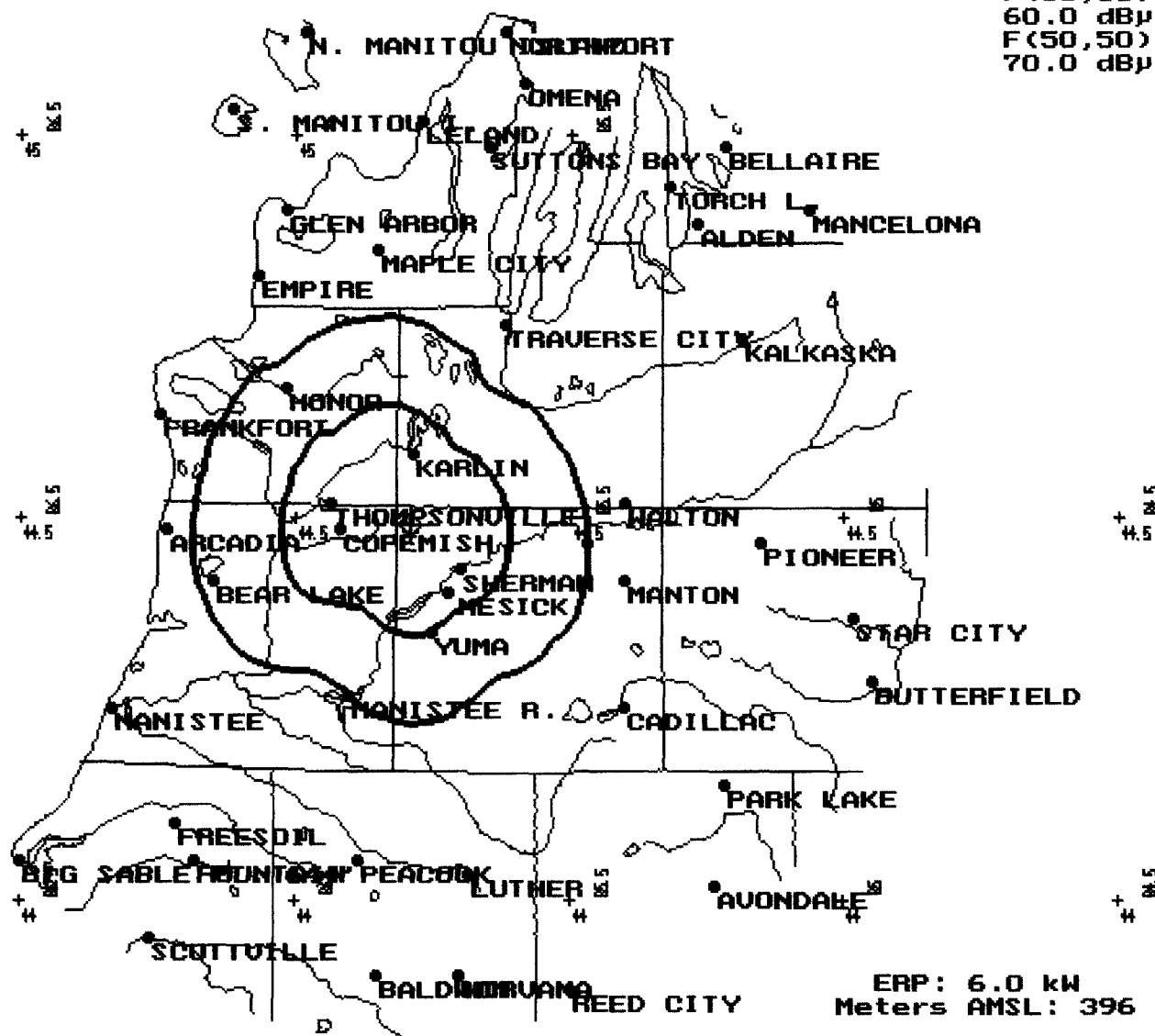
MAPFM search of channel 229A6 (93.7 MHz), at N. 44 29 30, W. 85 47 30.

Searching Channel 229A6 (93.7 MHz):

CALL	CITY	ST	CHN	CL	S	DIST	SEPN	BRNG	CLEARANCE
WBCM	Boyne City	MI	228	C2	L	117.3	106.0	37.9°	11.3
ALC	Boyne City	MI	228	C2	U	94.2	106.0	35.8°	-11.8
WBCT	Grand Rapids	MI	229	B	L	207.6	178.0	174.3°	29.6
ALC	Grand Rapids	MI	229	B	U	207.6	178.0	174.3°	29.6
WWJR	Sheboygan	WI	229	A	L	177.6	115.0	241.1°	62.6
ALC	Sheboygan	WI	229	A	U	177.6	115.0	241.1°	62.6
ALC	Mio	MI	230	C2	U	110.7	106.0	89.5°	4.7
WCLX	Mio	MI	230	C2	L	116.7	106.0	77.0°	10.7
ALC	Sturgeon Bay	WI	230	C1	U	133.4	133.0	290.2°	0.4
WDORFM	Sturgeon Bay	WI	230	C1	L	133.4	133.0	290.2°	0.4
ALC	Pentwater	MI	231	C3	U	94.8	42.0	213.2°	52.8
WEWM	Pentwater	MI	231	C3	C	81.5	42.0	210.4°	39.5
WEWM	Pentwater	MI	231	C3	C	81.5	42.0	210.4°	39.5
WIAR	Leland	MI	232	C3	L	46.9	42.0	357.1°	4.9
ALC	Leland	MI	232	C3	U	42.4	42.0	345.6°	0.4
NEW	Traverse City	MI	283	A	A	35.0	10.0	12.6°	25.0
NEW	Traverse City	MI	283	A	A	33.3	10.0	18.0°	23.3
NEW	Traverse City	MI	283	A	A	26.5	10.0	15.1°	16.5
NEW	Traverse City	MI	283	A	A	31.9	10.0	13.9°	21.9
NEW	Traverse City	MI	283	A	A	34.3	10.0	19.4°	24.3
ALC	Traverse City	MI	283	A	V	34.3	10.0	19.1°	24.3
NEW	Traverse City	MI	283	A	A	32.8	10.0	15.1°	22.8
NEW	Traverse City	MI	283	A	A	32.8	10.0	15.1°	22.8

EXHIBIT 9

F(50,50)
60.0 dBμ
F(50,50)
70.0 dBμ



ALTERNATIVE
CHANNEL
PROPOSAL
229A MESICK, MI

Coordinates:
N 44-29-30
W 85-47-30

Kilometer Scale
0 10 20 30 40 50 60

ERP: 6.0 kW
Meters AMSL: 396

Map Scale
1:1000000

EXHIBIT 10

MAPFM search of channel 227A6 (93.3 MHz), at N. 44 41 22, W. 86 15 20.

Searching Channel 227A6 (93.3 MHz):

CALL	CITY	ST	CHN	CL	S	DIST	SEPN	BRNG	CLEARANCE
WAUNFM	Kewaunee	WI	224	A	C	107.8	31.0	258.6°	76.8
ALC	Kewaunee	WI	224	A	U	107.8	31.0	258.6°	76.8
WAUNFM	Kewaunee	WI	224	A	L	107.8	31.0	258.6°	76.8
WKJFFM	Cadillac	MI	225	C	L	95.2	95.0	130.2°	0.2
ALC	Cadillac	MI	225	C	U	95.2	95.0	130.2°	0.2
ALC	Iron Mountain	MI	226	C1	U	188.3	133.0	311.9°	55.3
WIMK	Iron Mountain	MI	226	C1	L	188.3	133.0	311.9°	55.3
WQFM	Milwaukee	WI	227	B	L	221.8	178.0	216.6°	43.8
ALC	Milwaukee	WI	227	B	U	221.8	178.0	216.6°	43.8
ALC	Midland	MI	227	C2	U	196.4	166.0	118.5°	30.4
WKQZ	Midland	MI	227	C2	L	196.5	166.0	118.5°	30.5
WBCM	Boyne City	MI	228	C2	L	129.4	106.0	57.0°	23.4
ALC	Boyne City	MI	228	C2	U	106.5	106.0	59.3°	0.5
WOZZ	New London	WI	228	C2	L	182.7	106.0	265.0°	76.7
ALC	Sturgeon Bay	WI	230	C1	U	91.5	75.0	285.3°	16.5
WDORFM	Sturgeon Bay	WI	230	C1	L	91.5	75.0	285.3°	16.5

EXHIBIT 11

MAPFM search of channel 227A6 (93.3 MHz), at N. 44 42 20, W. 86 13 40.

Searching Channel 227A6 (93.3 MHz):

CALL	CITY	ST	CHN	CL	S	DIST	SEPN	BRNG	CLEARANCE
WAUNFM	Kewaunee	WI	224	A	C	110.3	31.0	257.9°	79.3
ALC	Kewaunee	WI	224	A	U	110.3	31.0	257.9°	79.3
WAUNFM	Kewaunee	WI	224	A	L	110.3	31.0	257.9°	79.3
WKJFFM	Cadillac	MI	225	C	L	94.7	95.0	131.9°	-0.3
ALC	Cadillac	MI	225	C	U	94.7	95.0	131.9°	-0.3
ALC	Iron Mountain	MI	226	C1	U	188.8	133.0	311.1°	55.8
WIMK	Iron Mountain	MI	226	C1	L	188.8	133.0	311.1°	55.8
WQFM	Milwaukee	WI	227	B	L	224.6	178.0	216.8°	46.6
ALC	Milwaukee	WI	227	B	U	224.6	178.0	216.8°	46.6
ALC	Midland	MI	227	C2	U	195.3	166.0	119.2°	29.3
WKQZ	Midland	MI	227	C2	L	195.4	166.0	119.3°	29.4
WBCM	Boyne City	MI	228	C2	L	126.6	106.0	57.1°	20.6
ALC	Boyne City	MI	228	C2	U	103.7	106.0	59.5°	-2.3
WOZZ	New London	WI	228	C2	L	185.1	106.0	264.5°	79.1
ALC	Sturgeon Bay	WI	230	C1	U	93.1	75.0	283.9°	18.1
WDORFM	Sturgeon Bay	WI	230	C1	L	93.1	75.0	283.9°	18.1

EXHIBIT 12

F(50,50)
60.0 dBμ
F(50,50)
70.0 dBμ

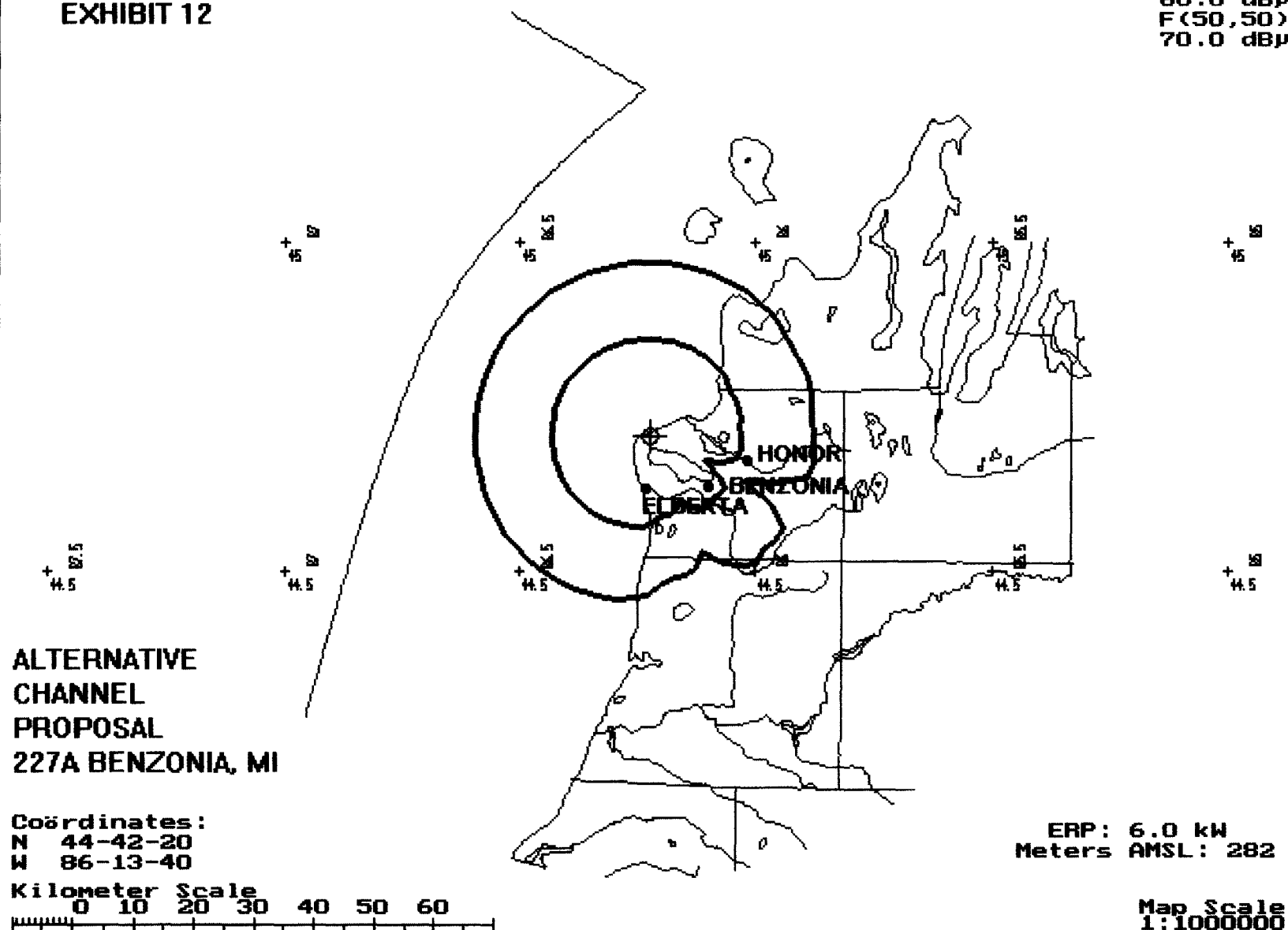


EXHIBIT 13

MAPFM search of channel 227A6 (93.3 MHz), at N. 44 49 28, W. 86 3 53.

Searching Channel 227A6 (93.3 MHz):

CALL	CITY	ST	CHN	CL	S	DIST	SEPN	BRNG	CLEARANCE
WKJFFM	Cadillac	MI	225	C	L	95.6	95.0	143.1°	0.6
ALC	Cadillac	MI	225	C	U	95.6	95.0	143.1°	0.6
ALC	Iron Mountain	MI	226	C1	U	190.5	133.0	305.6°	57.5
WIMK	Iron Mountain	MI	226	C1	L	190.5	133.0	305.6°	57.5
WQFM	Milwaukee	WI	227	B	L	243.0	178.0	217.4°	65.0
ALC	Milwaukee	WI	227	B	U	243.0	178.0	217.4°	65.0
ALC	Midland	MI	227	C2	U	191.1	166.0	124.6°	25.1
WKQZ	Midland	MI	227	C2	L	191.2	166.0	124.6°	25.2
WBCM	Boyne City	MI	228	C2	L	108.6	106.0	59.3°	2.6
ALC	Boyne City	MI	228	C2	U	86.0	106.0	62.7°	-20.0
ALC	Sturgeon Bay	WI	230	C1	U	103.6	75.0	275.0°	28.6
WDORFM	Sturgeon Bay	WI	230	C1	L	103.6	75.0	275.0°	28.6